## **Listing of Claims:**

This listing of claims replaces all prior versions, and listings, of claims in the captioned application.

1. (Original) A compound of formula (I),

the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen or taken together with R<sup>1</sup> may form a bivalent radical of formula -CH=CH-CH=CH-;

 $R^1$  is  $C_{1-6}$ alkyl or thienyl;

 $R^2$  is hydrogen or hydroxy or taken together with  $R^3$  or  $R^4$  may form =0;

R<sup>3</sup> is a radical selected from

$$-(CH_2)_{s}$$
-  $NR^6R^7$  (a-1),  
-O-H (a-2),  
-O-R<sup>8</sup> (a-3),  
-S- R<sup>9</sup> (a-4), or  
 $-C\equiv N$  (a-5),

wherein

s is 0, 1, 2 or 3;

 $R^6$  is –CHO,  $C_{1-6}$ alkyl, hydroxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl, di( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonylamino $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl, piperidinyl, piperidinyl $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl,  $C_{1-6}$ alkyloxy, thienyl $C_{1-6}$ alkyl, pyrrolyl $C_{1-6}$ alkyl, aryl $C_{1-6}$ alkylpiperidinyl, arylcarbonyl $C_{1-6}$ alkyl, arylcarbonylpiperidinyl $C_{1-6}$ alkyl, haloindozolylpiperidinyl $C_{1-6}$ alkyl, or aryl $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl;  $R^7$  is hydrogen or  $C_{1-6}$ alkyl;

is flydrogen of C1-banky1,

$$\begin{split} R^8 \ is \ C_{1\text{-}6} alkyl, \ C_{1\text{-}6} alkyl carbonyl \ or \ di(C_{1\text{-}6} alkyl) amino C_{1\text{-}6} alkyl; \ and \\ R^9 \ is \ di(C_{1\text{-}6} alkyl) amino C_{1\text{-}6} alkyl; \end{split}$$

or R<sup>3</sup> is a group of formula

$$-Z-$$
 (b-1),

wherein

Z is a heterocyclic ring system selected from

$$R^{10}$$
  $R^{10}$   $R^{10}$ 

$$R^{11}$$
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 

wherein each R<sup>10</sup> independently is hydrogen, C<sub>1-6</sub>alkyl, aminocarbonyl, hydroxy,

$$-C_{1-6}$$
alkanediyl $-N$ 
 $-C_{1-6}$ alkanediyl $N$ 
 $O$ 

 $C_{1-6}$ alkyloxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy $C_{1-6}$ alkylamino, aryl $C_{1-6}$ alkyl, di(phenyl $C_{2-6}$ alkenyl), piperidinyl $C_{1-6}$ alkyl,  $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl $C_{1-6}$ alkyl, aryloxy(hydroxy) $C_{1-6}$ alkyl, haloindazolyl, aryl $C_{1-6}$ alkyl, aryl $C_{2-6}$ alkenyl, morpholino,  $C_{1-6}$ alkylimidazolyl, or pyridinyl $C_{1-6}$ alkylamino;

 $R^4$  is hydrogen,  $C_{1-6}$ alkyl, furanyl, pyridinyl, aryl $C_{1-6}$ alkyl or ;

aryl is phenyl or phenyl substituted with halo, C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkyloxy;

with the proviso that when

n is 0, X is N,  $R^2$  is hydrogen,  $R^3$  is a group of formula (b-1), Z is the heterocyclic ring system (c-2) or (c-4) wherein said heterocyclic ring system Z is attached to the rest of the molecule with a nitrogen atom, and  $R^{10}$  is hydrogen; then  $R^4$  is other than  $C_{1-6}$ alkyl or pyridinyl.

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- 2. (Original) A compound as claimed in claim 1 wherein n is 0 or 1; X is N or  $CR^5$ , wherein  $R^5$  is hydrogen;  $R^3$  is a radical selected from (a-1), (a-2) or (a-3) or is a group of formula (b-1) i.e. -Z-; s is 0, 1 or 2;  $R^6$  is -CHO,  $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkyl, arylcarbonylpiperidinyl $C_{1-6}$ alkyl or aryl $C_{1-6}$ alkyl( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl;  $R^8$  is  $C_{1-6}$ alkyl; when  $R^3$  is a group of formula (b-1) then Z is a heterocyclic ring system selected from (c-2) or (c-4); and each  $R^{10}$  independently is hydrogen,  $C_{1-6}$ alkyl or  $C_{1-6}$ alkyloxy $C_{1-6}$ alkylamino.
- 3. (Previously Presented) A compound according to claim 1 wherein n is 0; X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen; R<sup>1</sup> is C<sub>1-6</sub>alkyl; R<sup>2</sup> is hydrogen or hydroxy or taken together with R<sup>4</sup> may form =O; R<sup>3</sup> is a radical selected from (a-1) or (a-2); s is 0 or 1; R<sup>6</sup> is –CHO or C<sub>1-6</sub>alkyl; and R<sup>4</sup> is hydrogen, C<sub>1-6</sub>alkyl or

4. (Currently Amended) A compound selected from the group consisting of:

4. (Currently Amended) A compound selected from the group consisting of.	
HN Compound 1	OH Compound 5
OH Compound 7	compound 3
HO Compound 17	

and the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof.

- 5. (Cancelled)
- 6. (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 1.
- 7. (Cancelled).

8. (Currently Amended) A method of treating in a subject a PARP mediated disorder, <u>said</u> <u>method</u> comprising administering to the subject a therapeutically effective amount of a compound of formula (I)

the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen or taken together with R<sup>1</sup> may form a bivalent radical of formula -CH=CH-CH=CH-;

 $R^1$  is  $C_{1-6}$ alkyl or thienyl;

 $R^2$  is hydrogen or hydroxy or taken together with  $R^3$  or  $R^4$  may form =0;

R<sup>3</sup> is a radical selected from

wherein

s is 0, 1, 2 or 3;

 $R^6$  is –CHO,  $C_{1-6}$ alkyl, hydroxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl, di( $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonylamino $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl, piperidinyl, piperidinyl $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl,  $C_{1-6}$ alkyloxy, thienyl $C_{1-6}$ alkyl, pyrrolyl $C_{1-6}$ alkyl, aryl $C_{1-6}$ alkylpiperidinyl, arylcarbonyl $C_{1-6}$ alkyl, arylcarbonylpiperidinyl $C_{1-6}$ alkyl, haloindozolylpiperidinyl $C_{1-6}$ alkyl, or aryl $C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl;  $R^7$  is hydrogen or  $C_{1-6}$ alkyl;

$$\begin{split} R^8 \ is \ C_{1\text{-}6} alkyl, \ C_{1\text{-}6} alkyl carbonyl \ or \ di(C_{1\text{-}6} alkyl) amino C_{1\text{-}6} alkyl; \ and \\ R^9 \ is \ di(C_{1\text{-}6} alkyl) amino C_{1\text{-}6} alkyl; \end{split}$$

or R<sup>3</sup> is a group of formula

$$-Z-$$
 (b-1),

wherein

Z is a heterocyclic ring system selected from

$$R^{10}$$
  $R^{10}$   $R^{10}$ 

$$R^{11}$$
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 

wherein each R<sup>10</sup> independently is hydrogen, C<sub>1-6</sub>alkyl, aminocarbonyl, hydroxy,

 $C_{1-6}$ alkyloxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy $C_{1-6}$ alkylamino, aryl $C_{1-6}$ alkyl, di(phenyl $C_{2-6}$ alkenyl), piperidinyl $C_{1-6}$ alkyl,  $C_{3-10}$ cycloalkyl,  $C_{3-10}$ cycloalkyl $C_{1-6}$ alkyl, aryloxy(hydroxy) $C_{1-6}$ alkyl, haloindazolyl, aryl $C_{1-6}$ alkyl, aryl $C_{2-6}$ alkenyl, morpholino,  $C_{1-6}$ alkylimidazolyl, or pyridinyl $C_{1-6}$ alkylamino;

 $R^4$  is hydrogen,  $C_{1-6}$ alkyl, furanyl, pyridinyl, aryl $C_{1-6}$ alkyl or ;

aryl is phenyl or phenyl substituted with halo, C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkyloxy.

## 9. (Cancelled)

10. (Previously Presented) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.

- 11. (Previously Presented) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy
- 12. (Original) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of formula (I)

the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR<sup>5</sup>, wherein R<sup>5</sup> is hydrogen or taken together with R<sup>1</sup> may form a bivalent radical of formula -CH=CH-CH=CH-;

R<sup>1</sup> is C<sub>1-6</sub>alkyl or thienyl;

R<sup>2</sup> is hydrogen or hydroxy or taken together with R<sup>3</sup> or R<sup>4</sup> may form =O;

R<sup>3</sup> is a radical selected from

$$-(CH_2)_{S^-} NR^6R^7$$
 (a-1),  
-O-H (a-2),  
-O-R<sup>8</sup> (a-3),  
-S- R<sup>9</sup> (a-4), or  
—C $\equiv$ N (a-5),

wherein

s is 0, 1, 2 or 3;

 $R^6$  is –CHO,  $C_{1-6}$ alkyl, hydroxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonyl, di $(C_{1-6}$ alkyl)amino $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy $C_{1-6}$ alkyl,  $C_{1-6}$ alkylcarbonylamino $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl, piperidinyl $C_{1-6}$ alkyl, piperidinyl $C_{1-6}$ alkylaminocarbonyl,  $C_{1-6}$ alkyloxy, thienyl $C_{1-6}$ alkyl,

 $pyrrolylC_{1\text{-}6}alkyl, arylC_{1\text{-}6}alkylpiperidinyl, arylcarbonylC_{1\text{-}6}alkyl, arylcarbonylpiperidinylC_{1\text{-}6}alkyl, haloindozolylpiperidinylC_{1\text{-}6}alkyl, or arylC_{1\text{-}6}alkyl(C_{1\text{-}6}alkyl)aminoC_{1\text{-}6}alkyl;$ 

 $R^7$  is hydrogen or  $C_{1-6}$ alkyl;

 $R^8$  is  $C_{1\text{--}6}alkyl,\,C_{1\text{--}6}alkylcarbonyl$  or  $di(C_{1\text{--}6}alkyl)aminoC_{1\text{--}6}alkyl;$  and

R<sup>9</sup> is di(C<sub>1-6</sub>alkyl)aminoC<sub>1-6</sub>alkyl;

or R<sup>3</sup> is a group of formula

$$-Z-$$
 (b-1),

wherein

Z is a heterocyclic ring system selected from

$$R^{10}$$
  $R^{10}$   $R$ 

$$R^{11}$$
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 
 $R^{10}$ 

wherein each R<sup>10</sup> independently is hydrogen, C<sub>1-6</sub>alkyl, aminocarbonyl, hydroxy,

$$-C_{1-6}$$
alkanediyl $-N$ 
,  $-C_{1-6}$ alkanediyl $N$ 
O

$$\begin{split} &C_{1\text{-}6}alkyloxyC_{1\text{-}6}alkyl,\ C_{1\text{-}6}alkyloxyC_{1\text{-}6}alkylamino,\ arylC_{1\text{-}6}alkyl,\\ &di(phenylC_{2\text{-}6}alkenyl),\ piperidinylC_{1\text{-}6}alkyl,\ C_{3\text{-}10}cycloalkyl,\ C_{3\text{-}10}cycloalkylC_{1\text{-}6}alkyl,\\ &aryloxy(hydroxy)C_{1\text{-}6}alkyl,\ haloindazolyl,\ arylC_{1\text{-}6}alkyl,\ arylC_{2\text{-}6}alkenyl,\ morpholino,\ C_{1\text{-}6}alkylimidazolyl,\ or\ pyridinylC_{1\text{-}6}alkylamino; \end{split}$$

 $R^4$  is hydrogen,  $C_{1-6}$ alkyl, furanyl, pyridinyl, aryl $C_{1-6}$ alkyl or

aryl is phenyl or phenyl substituted with halo, C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkyloxy.

13. (Previously Presented) A process for preparing a compound as claimed in claim 1, comprising: a) hydrolysis of intermediates of formula (VIII),

b) cyclization of intermediates of formula (X),

c) condensation of an ortho-benzenediamine of formula (XI) with an ester of formula (XII) wherein R<sup>h</sup> is C<sub>1-6</sub>alkyl, into compounds of formula (I), wherein X is N, herein referred to as compounds of formula (I-i),

$$R^{4} \xrightarrow{R^{2}} (CH_{2})_{n} \xrightarrow{NH_{2}} R^{1} \xrightarrow{O} OR^{h} \xrightarrow{R^{4}} R^{2} \xrightarrow{(CH_{2})_{n}} XH_{2}$$

$$(XI) \qquad (XII) \qquad (I-i)$$

- 14. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 2.
- 15. (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 3.
- 16 (New) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 4.

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17. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 2.

- 18. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.
- 19. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- 20. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 3.
- 21. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.
- 22. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- 23. (New) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 4.
- 24. (New) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy.

- 25. (New) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.
- 26 (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 2.
- 27 (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 3.
- 28 (New) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 4.
- 29. (New) A product made by the process of claim 13.
- 30. (New) A pharmaceutical composition made by the process of claim 13.